A pragmatic approach to testing electronic systems

As we move ahead in the electronic age, rapid changes in technology pose an ever-increasing number of challenges in testing electronic products. Many practicing engineers are involved in this arena, but few have a chance to study the field in a systematic way—learning takes place on the job. By covering the fundamental disciplines in detail, Principles of Testing Electronic Systems provides design engineers with the much-needed knowledge base.

Divided into five major parts, this highly useful reference relates design and tests to the development of reliable electronic products; shows the main vehicles for design verification; examines designs that facilitate testing; and investigates how testing is applied to random logic, memories, FPGAs, and microprocessors. Finally, the last part offers coverage of advanced test solutions for today's very deep submicron designs. The authors take a phenomenological approach to the subject matter while providing readers with plenty of opportunities to explore the foundation in detail. Special features include:

* An explanation of where a test belongs in the design flow
* Detailed discussion of scan-path and ordering of scan-chains
* BIST solutions for embedded logic and memory blocks
* Test methodologies for FPGAs

* A chapter on testing system on a chip

* Numerous references

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